AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior versions, and listings, of claims in this application.

Listing of Claims

1-6. (Canceled)

7. (Currently Amended) A composition comprising a protein in crystalline form wherein the protein consists of SEQ ID NO:5, wherein said protein ~~forms a~~ is in complex with ~~an inhibitor ligand~~ trichostatin and wherein the protein crystal has a crystal lattice in a $P2_12_12_1$ space group and unit cell dimensions, +/- 5%, of a=92.1Å, b= 97.6Å, c=138.9Å, and $\alpha=\beta=\gamma=90°$.

8. (Currently Amended) The composition according to claim 7 wherein the protein crystal ~~unit cell~~ comprises three molecules of the protein ~~molecules~~.

9. (Canceled)

10. (Previously Presented) The composition according to claim 7 wherein the protein crystal diffracts X-rays for a determination of structure coordinates to a resolution of a value equal to or less than 3.0 Angstroms.

11-24. (Canceled)

25. (Currently Amended) A method comprising:

forming a crystallization volume comprising a precipitant solution and a protein that consists of SEQ ID NO:5, wherein said protein ~~forms a~~ is in complex with ~~an inhibitor ligand~~ trichostatin ~~and wherein the protein crystal has a crystal lattice in a $P2_12_12_1$ space group and unit cell dimensions, +/- 5%, of a=92.1Å, b= 97.6Å, c=138.9Å, and $\alpha=\beta=\gamma=90°$~~; and

storing the crystallization volume under conditions suitable for crystal formation of the protein, wherein the protein crystal has a crystal lattice in a $P2_12_12_1$ space group and unit cell dimensions, +/- 5%, of a=92.1Å, b= 97.6Å, c=138.9Å, and $\alpha=\beta=\gamma=90°$.

26. (Currently Amended) The method according to claim 25 wherein the protein crystal ~~unit cell~~ comprises three molecules of the protein ~~molecules~~.

27. (Canceled)

28. (Previously Presented) The method according to claim 25 wherein a protein crystal is produced that diffracts X-rays for a determination of structure coordinates to a resolution of a value equal to or less than 3.0 Angstroms.

29-30. (Canceled)

31. (Previously Presented) The method according to claim 25 wherein a protein crystal is produced, the method further comprising:

diffracting the protein crystal to produce a diffraction pattern; and

solving the structure of the protein from the diffraction pattern.

32-48. (Canceled)

49. (Currently Amended) The method according to claim 31, the method further comprising:

performing rational drug design using the solved structure;

identifying one or more entities that potentially associate with the protein crystal,

selecting one or more entities based on the rational drug design; and

contacting the selected one or more entities with the protein.

50. (Currently Amended) The method according to claim [[45]] 49, the method further comprising measuring an activity of the protein when contacted with the one or more entities.

51. (Currently Amended) The method according to claim [[45]] 49, the method further comprising comparing activity of the protein in a presence of and in the absence of the one or more entities; and selecting entities where activity of the protein changes depending whether a particular entity is present.

52. (Currently Amended) The method according to claim [[45]] 49, the method further comprising contacting cells expressing the protein with the one or more entities and detecting a change in a phenotype of the cells when a particular entity is present.

53. (Canceled)